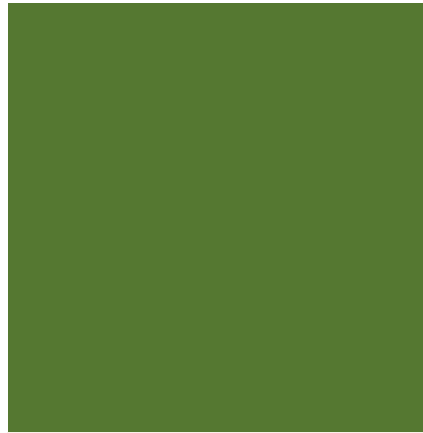


# software engineering

CAREER GUIDE 2024







# SAI PALI INSTITUTE OF TECHNOLOGY & MANAGEMENT



WHAT IF EVERY STUDENT WAS READY TO DO A JOB,  
BECAUSE EVERY STUDENT HAS ALREADY DONE IT?

---

RELEVANT  
EDUCATION

IN DEPTH, HANDS-ON  
PRACTICAL TRAINING

100%  
ENGAGEMENT

---

**STUDY COMPUTER ENGINEERING**  
WWW.SAIPALI.EDUCATION



The job outlook for  
a software  
engineering career  
is amazing.

For the admission criteria and how to apply visit  
[www.saipali.education](http://www.saipali.education)  
[www.saipali.education](http://www.saipali.education)





**SAI PALI**  
INSTITUTE OF  
TECHNOLOGY & MANAGEMENT  
(Sai Pali Group)

Applying Knowledge

The Bureau of Labor Statistics projects that employment for software developers, which includes software engineers, is going to grow .

BLS projected to grow 22 percent from 2020 to 2030, much faster than the average for all occupations.



For the admission criteria and how to apply visit  
[www.saipali.education](http://www.saipali.education)  
[www.saipali.education](http://www.saipali.education)

# what is software engineering?

Software engineering is a detailed study of engineering to the design, development and maintenance of software. Software engineering was introduced to address the issues of low-quality software projects. Problems arise when a software generally exceeds timelines, budgets, and reduced levels of quality. It ensures that the application is built consistently, correctly, on time and on budget and within requirements. The demand of software engineering also emerged to cater to the immense rate of change in user requirements and environment on which application is supposed to be working.



For the admission criteria and how to apply visit  
[www.saipali.education](http://www.saipali.education)

[www.saipali.education](http://www.saipali.education)



# Who is Software Engineer?

A software engineer is a computer science professional who applies engineering principles and their knowledge of programming languages to the design, development, testing, evaluation and maintenance of computer software. Software engineers have extensive knowledge of computer operating systems, software development and programming languages. They apply engineering principles at every state during the development process in order to create customized software systems for clients.



For the admission criteria and how to apply visit  
[www.saipali.education](http://www.saipali.education)

[www.saipali.education](http://www.saipali.education)

# Core areas of the course :

## Advanced Diploma in Software Engineering

### Web Designing and Development

Web design determines the look and feel of a website, while web development determines how it functions.

### Interactive Web Application Development

It integrates software into your web page to enhance customer engagement levels through an excellent and relevant visitor experience

### Database Management System

Database Management Systems (DBMS) are software systems used to store, retrieve, and run queries on data. A DBMS serves as an interface between an end-user and a database, allowing users to create, read, update, and delete data in the database

### System Software Development

A set of computer science activities dedicated to the process of creating, designing, deploying and supporting software. Software itself is the set of instructions or programs that tell a computer what to do.

### Mobile Application Development

Mobile application development is the process of creating software applications that run on a mobile device, and a typical mobile application utilizes a network connection to work with remote computing resources.

### Application Software Development

Application development is the process of designing, building, and implementing software applications. It can be done by massive organizations with large teams working on projects, or by a single freelance developer



## Course outline Semester 1



- **Information Technology**
- **Programming Using C**
- **Fundamentals of Database Management System**
- **Web Designing**
- **User Interface Design Framework**

For the admission criteria and how to apply visit  
[www.saipali.edu.np](http://www.saipali.edu.np)

## Course outline Semester 2



- **Object Oriented programming using C++**
- **Web Development Technologies using PHP-I**
- **Web Development Technologies using PHP-II**
- **Computer Graphics**
- **Software Engineering & Project Management**



## Course outline Semester 3



- Core Java
- Relational Database Management Systems
- Introduction to Linux
- Web Development Framework
- Minor Project

For the admission criteria and how to apply visit  
[www.saipali.edu.np](http://www.saipali.edu.np)

## Course outline Semester 4



- Advanced Java
- Database Administrator (DBA)
- Mobile Application Development
- Object Oriented System Analysis & Design
- Major Group Project





## Up-to-date skills

Discipline and practice using current industry skills.



In Software Engineering  
2 years advanced  
program  
students will learn and  
demonstrate the following:



## Competitive skills

Preparation to enter a competitive industry & How to create the latest software and technology

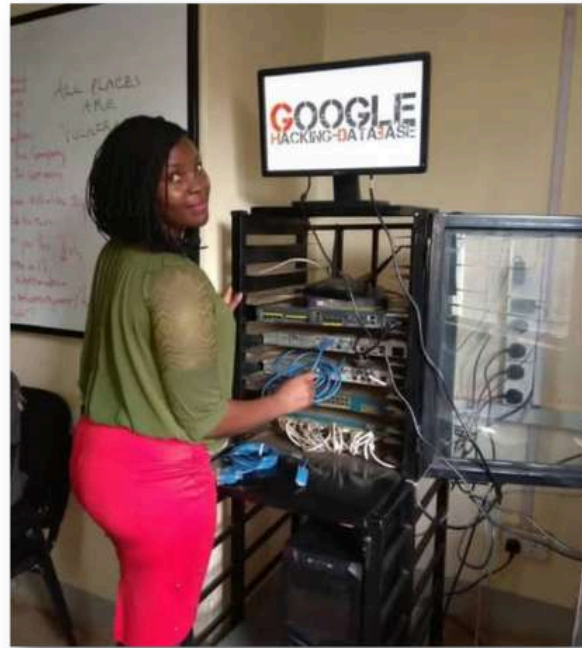


## Expert in the field

Ability to deliver a project from the beginning to the end in a professional manner







**Practical international curriculum**



**Multiple jobs opportunities**



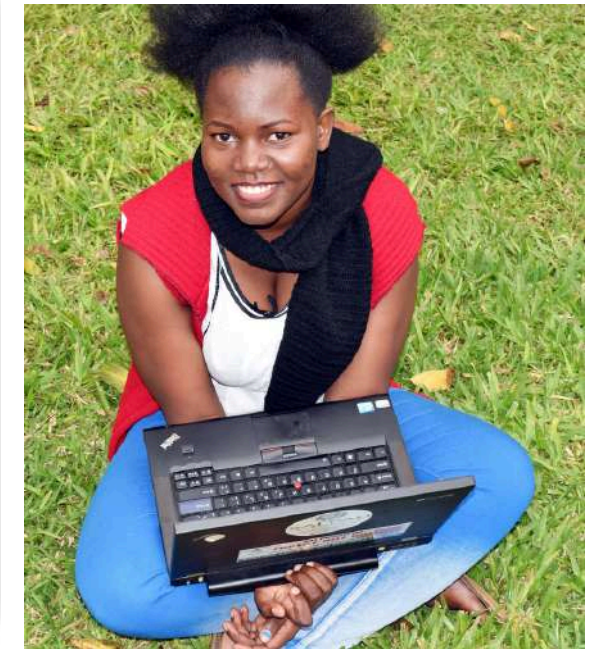
**Passionate and self-driven classmates**



**Ready made for a job market**



**Industrial trainings**



**Getting powerful & very useful skills**



**High-Level Transferable Skills.**



**ICT gives you possibility to change the world**



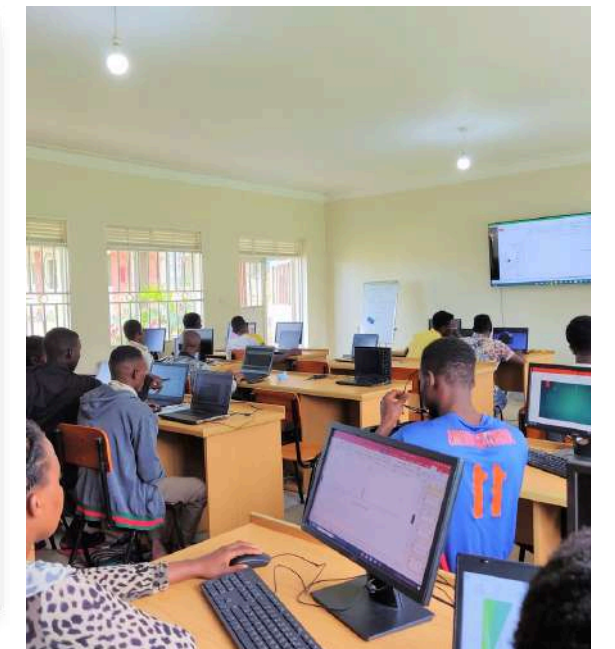
**Friendship for life**



**Extracurricular Activities**



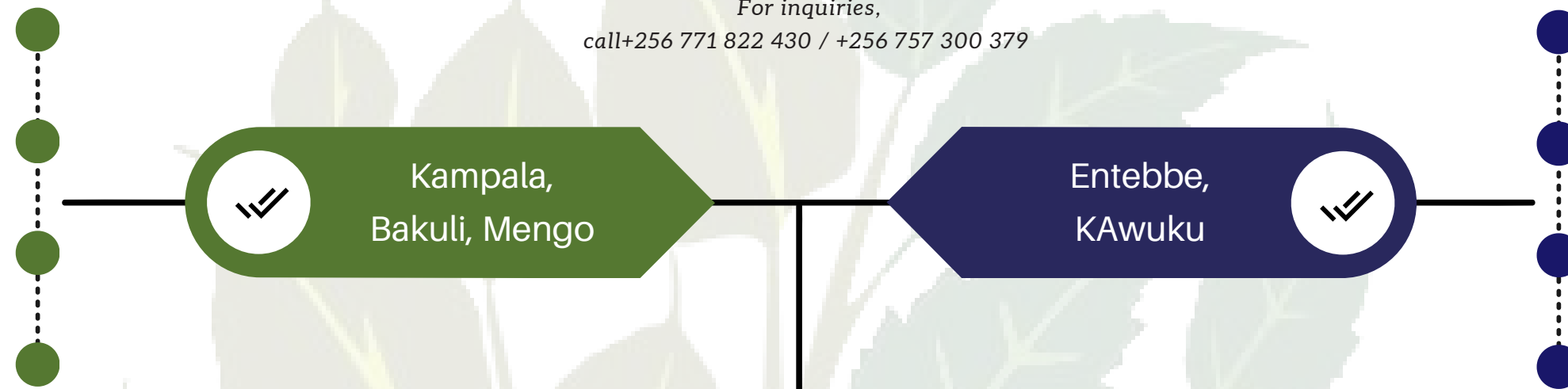
**An Expert in Your Field**



**in depth, hands-on practical training**



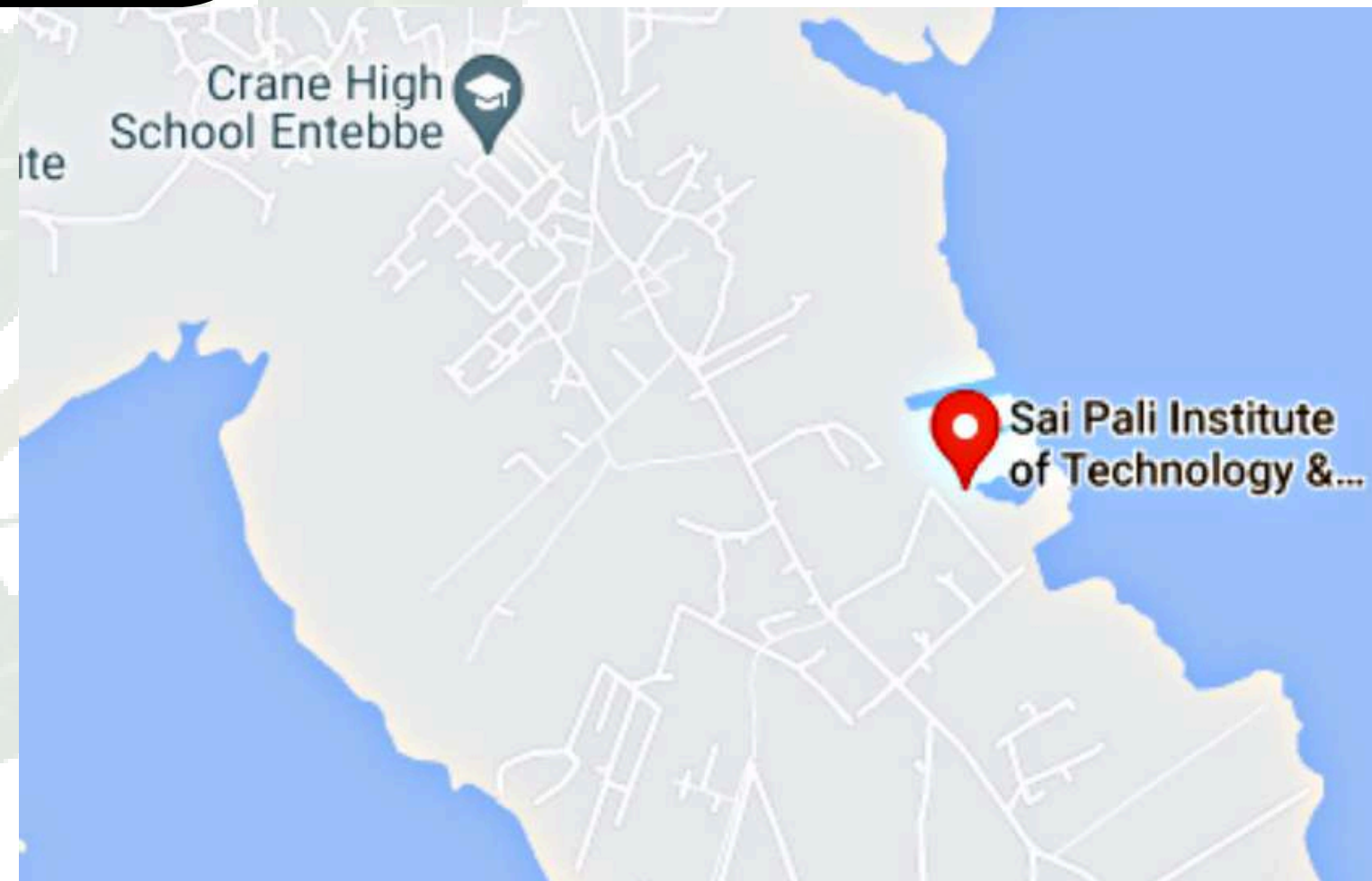
For inquiries,  
call+256 771 822 430 / +256 757 300 379



**SAI PALI INSTITUTE OF TECHNOLOGY & MANAGEMENT**



**Kampala :Plot #887, Block-4, Bakuli, Mengo, Namirembe Rd., Opp. Victorious Primary School.**



**Entebbe: Bugiri- Bukasa, Kawuku Parish Wakiso District, Bwerenga Rd., Next To Pioneer Primary School.**